Amendment to the Specification:

Please replace the paragraph that begins on page 3, line 25 with the following amended paragraph:

The main magnetic field of the MR device that is required to flow through the examination area can in a known manner be formed for example with an air-core coil, the windings of which are designed to be superconductive depending on the desired field strength, or with permanent magnets. The high-frequency magnetic field that is parallel to the main magnetic field can be generated, for example, by the coil arrangement of the main magnetic field additionally being acted upon by an electrical pulse, as a result of which additionally a high-frequency magnetic field parallel to the main magnetic field is produced in the examination area. In particular, in the case of a superconductive configuration of the coil of the main magnetic field, the use of a separate coil arrangement is also possible as an alternative, ~~as claimed in Claim 3~~ for example a coil arrangement for an MR device for generating a high frequency magnetic field in the examination area, which high frequency magnetic field runs essentially parallel to the main magnetic field of the MR device, in order to generate the desired high-frequency magnetic field. Such a coil arrangement can for example be wound in a manner parallel to or alternating with the windings of the coil arrangement of the main magnetic field on a common carrier. It is also possible to design an independent component for an MR device, on which component the coil arrangement is arranged and which component is positioned inside or outside the coil arrangement of the main magnetic field. Such a component can then be marketed, for example, as an optional additional component for an MR device.

Please replace the paragraph that begins on page 4, line 7 with the following amended paragraph:

The nuclear resonance signal excited by the high-frequency magnetic field is detected using known detection means, such as antennas or coils. These detection means can be used both for detecting nuclear resonance signals for position determination and for detecting imaging nuclear resonance signals (to generate

imaging nuclear resonance signals, the MR device then also additionally contains means for generating a high-frequency magnetic field in the examination area, which high-frequency magnetic field runs essentially perpendicular to the main magnetic field). The detected nuclear resonance signal passes into an evaluation unit which, in addition to a possible image reconstruction, also evaluates the nuclear resonance signal for position determination purposes. Furthermore, the MR device contains a control unit which controls the other aforesaid components in a manner such that a method according to the invention can be carried out. Both the evaluation unit and the control unit can be configured such that they can be programmed, and this enables them~~, as claimed in Claim 10,~~ to carry out their respective task. For example, a computer program or computer program product can be provided which enables the programmable components of an MR device to carry out a method of determining the position of an object located in the examination area of the MR device, the method comprising: a) generating high-frequency magnetic field in the examination area, which high-frequency magnetic field runs essentially parallel to a main magnetic field that is active at the same time, whereby a component of the high-frequency magnetic field that is perpendicular to the main magnetic field being produced from the high-frequency magnetic field by conversion means fitted on the object, in the vicinity thereof, b) detecting the nuclear resonance signal excited as a result of the perpendicular component of the high-frequency magnetic field, in conjunction with a gradient magnetic field, and c) evaluating the nuclear resonance signal and determining the position of the object.

Please replace the paragraph that begins on page 4, line 20 with the following amended paragraph:

The conversion means, which are necessary in order to carry out the method according to the invention, may be formed for example by an active unit having a transmitter and a receiver, wherein the high-frequency magnetic field is received by a receiving antenna and is emitted again, in a manner rotated through 90° in spatial terms, by an emitting antenna. One possible alternative is~~, as claimed in Claim 4,~~ the configuration using a coil arrangement, which coil arrangement is

dimensioned such that it can be fitted to the object whose position is to be determined. For example, a conversion means for an MR device can be provided for generating perpendicular components for a high frequency magnetic field, having at least one coil arrangement with at least one coil, the coil axis of which forms an angle other than 90°, preferably an angle of 45°, with respect to the direction of the high frequency magnetic field. The coil of the coil arrangement must be positioned such that its coil axis is at an angle other than 90° with respect to the high-frequency magnetic field. Then a current is induced in the coil arrangement, by means of which current a high-frequency magnetic field is produced in the vicinity of the coil arrangement, which high-frequency magnetic field contains a component that is perpendicular to the high-frequency magnetic field that is being excited. The perpendicular component is at its greatest when the coil axis of the coil forms an angle of 45° with respect to the high-frequency magnetic field. ~~As claimed in Claim 5, it~~ Optionally, the coil arrangement can form a resonant circuit, so that the perpendicular component can be additionally increased, with the resonant frequency preferably corresponding to the frequency of the high-frequency magnetic field. If the object moves during examination of the subject, then the geometric condition cannot under some circumstances always be achieved. ~~Therefore, as claimed in Claim 6, a~~ Accordingly, in some embodiments conversion means for an MR device is provided for generating perpendicular components for a high frequency magnetic field, having at least two coil arrangements with in each case at least one coil, wherein the coil axes of the coils form an angle other than 90°, preferably an angle of 45°, with respect to one another. A coil arrangement having a number of coils is proposed, where the coil axes of the coils should not assume an angle of 90° with respect to one another since then the high-frequency magnetic fields of the individual coils, which high-frequency magnetic fields are perpendicular to the main magnetic field, would eliminate each other out.

Please replace the paragraph that begins on page 5, line 7 with the following amended paragraph:

If the MR device is used for examinations or operations using a medical intervention instrument, then ~~as claimed in Claim 7~~ such a coil arrangement can be fitted to the instrument, in order to determine its position, in particular the position of the tip of the instrument, during the examination and to display this position to the user. For example, a medical intervention instrument can be provided that includes an invasive portion that can be inserted into the body, on which portion conversion means are arranged for carrying out a method of determining the position of an object located in the examination area of the MR device, the method comprising: a) generating high-frequency magnetic field in the examination area, which high-frequency magnetic field runs essentially parallel to a main magnetic field that is active at the same time, whereby a component of the high-frequency magnetic field that is perpendicular to the main magnetic field being produced from the high-frequency magnetic field by conversion means fitted on the object, in the vicinity thereof, b) detecting the nuclear resonance signal excited as a result of the perpendicular component of the high-frequency magnetic field, in conjunction with a gradient magnetic field, and c) evaluating the nuclear resonance signal and determining the position of the object. When using a catheter as ~~claimed in Claim 8~~ said medical intervention instrument, the conversion means can be particularly easily fitted to the catheter by means of a carrier body ~~as claimed in Claim 9~~. For example, said catheter can have a carrier body that can be fitted to the catheter tip, on which carrier body three planar coil arrangements are fitted, wherein the coil axes of the coils in each case form an angle other than 90°, preferably an angle of 45°.